



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/899,390	07/05/2001	Dale Francis Obeshaw	H-199376	3506

7590 02/13/2003

EDMUND P. ANDERSON  
DELPHI TECHNOLOGIES, INC.  
Legal Staff, Mail Code: 480-414-420  
P.O. Box 5052  
Troy, MI 48007-5052

EXAMINER

MIGGINS, MICHAEL C

ART UNIT	PAPER NUMBER
----------	--------------

1772

DATE MAILED: 02/13/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/899,390

Applicant(s)

OBESHAU, DALE FRANCIS

Examiner

Michael C. Miggins

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 05 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) 15-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 30-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-32 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1, 4-5.
- 4) ☒ Interview Summary (PTO-413) Paper No(s). 7.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

**DETAILED ACTION**

***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-14 and 30-32, drawn to a contoured structural member, classified in class 428, subclass 36.91.
  - II. Claims 15-29, drawn to a method for making a contoured structural member, classified in class 156, subclass 189.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product can be made via rotational molding.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
4. Because these inventions are distinct for the reasons given above and the search required for Group II is not required for Group I, restriction for examination purposes as indicated is proper.
5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Art Unit: 1772

6. During a telephone conversation with Edmund Anderson on 2/7/03 a provisional election was made with traverse to prosecute the invention of group I, claims 1-14 and 30-32. Affirmation of this election must be made by applicant in replying to this Office action. Claims 15-29 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

### ***Claim Objections***

7. Claim 14 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 14 recites a composite overwrap on a portion of the outer surface of the structural member. However, claim 14 is dependant upon claim 13 which also recites a composite overwrap on a portion of the outer surface of the structural member thus failing to further limit claim 13, appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 1772

Claim 8 recites the limitation "the at least one initiator" in line 2. There is insufficient positive antecedent basis for this limitation in the claim.

### ***Double Patenting***

10. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

11. Claims 1-14 and 30-32 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over either claims 1-20 of copending Application No. 09/899,320, claims 1-20 of copending Application No. 09/668,429, claims 1-13, 15-41 of copending Application No. 09/704,228, claims 1-39 of copending Application No. 09/900,762, or claims 1-20 and 33-35 of copending Application No. 09/809,778 in view of Quigley et al. (U.S. Patent No. 5,888,601).

Claims 1-14 of copending Application No. 09/899,390, claims 1-20 of copending Application No. 09/668,429, claims 1-13, 15-41 of copending Application No. 09/704,228, claims 1-39 of copending Application No. 09/900,762, or claims 1-20 and 33-35 of copending Application No. 09/809,778 all recite a contoured structural

Art Unit: 1772

member, comprising at least one contoured inner layer comprising a composite or material, at least one contoured outer layer comprising a composite material, wherein the structural member has a closed configuration, wherein the composite material is a reinforced resin matrix material, wherein the reinforced resin matrix material comprises at least one prepreg ply, wherein both the at least one inner layer and the at least one outer layer comprise a composite material (applies to instant claims 1-3, 5, 10-14 and 30-32).

With regards to claims 30-32, claims 30-32 recite the same structures as are recited in independent claims 1, 10, 11 and 12 except for the limitation that an outer surface of the structural member has a polygonal shape. It has been found that even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Therefore any process limitations recited in claims 30-32 have been given little to no patentable weight.

Copending Application No. 09/899,390, copending Application No. 09/668,429, copending Application No. 09/704,228, copending Application No. 09/900,762, or copending Application No. 09/809,778 all recite applicant's invention substantially as claimed. However, none of the copending applications recite a contoured structural

Art Unit: 1772

member wherein an outer surface of the structural member has a polygonal shape, wherein the interior region is hollow, partially filled or completely filled, wherein the prepreg material comprises a plurality of layers, wherein the plurality of layers have a plurality of fibers with an orientation ranging from 0 to about 90 degrees and further comprising an over wrap on a portion of the outer surface of the structural member.

Quigley et al. teach a contoured structural member (abstract, see also Fig. 2) wherein an outer surface of the structural member has a polygonal shape (see Figs. 7-8 and 12, see also column 3, lines 3-7), wherein the interior region is hollow, partially filled or completely filled (see Figs. 7-13), wherein a prepreg material (teaches prepreg column 2, lines 30-35 and column 5, lines 1-8) comprises a plurality of layers (see Fig. 1), wherein the plurality of layers have a plurality of fibers with an orientation ranging from 0 to about 90 degrees (see column 5, line 66-67 through column 6, lines 1-6) and further comprising an over wrap on a portion of the outer surface of the structural member (122 from Fig. 1, see also column 5, lines 1-8, column 5, lines 50-51) (applies to instant claims 1, 4, 6-9, 10-11 and 13) for the purpose of providing improved durability.

Therefore it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to have provided an outer surface of the structural member has a polygonal shape, wherein the interior region is hollow, partially filled or completely filled, wherein the prepreg material comprises a plurality of layers, wherein the plurality of layers have a plurality of fibers with an orientation ranging from 0 to about 90 degrees and further comprising an over wrap on a portion of the outer surface

Art Unit: 1772

of the structural member in the contoured structural members recited in Copending Application No. 09/899,390, copending Application No. 09/668,429, copending Application No. 09/704,228, copending Application No. 09/900,762, or copending Application No. 09/809,778 in order to provide improved durability as taught or suggested by Reid et al..

12. Claim 8 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over either claims 1-20 of copending Application No. 09/899,320, claims 1-20 of copending Application No. 09/668,429, claims 1-13, 15-41 of copending Application No. 09/704,228, claims 1-39 of copending Application No. 09/900,762, or claims 1-20 and 33-35 of copending Application No. 09/809,778 in view of Quigley et al. (U.S. Patent No. 5,888,601), as applied to claims 1-14 and 30-32 above, and further in view of Reid et al..

Copending Application No. 09/899,390, copending Application No. 09/668,429, copending Application No. 09/704,228, copending Application No. 09/900,762, or copending Application No. 09/809,778 all recite applicant's invention substantially as claimed. However, none of the copending applications recite a contoured structural member, wherein the structural member has at least one end with the at the at least one initiator not located near the at least one end.

Read et al. teach a contoured structural tube (abstract, Figs. 2a and 2b), wherein the structural member has at least one end with the at the at least one initiator not located near the at least one end (18 from Fig. 3a) for the purpose of providing reduced crush initiation forces in composite tubes for absorption of impact energy.



Therefore it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to have provided at least one end with the at the at least one initiator not located near the at least one end in the contoured structural member of the copending applications in order to provide reduced crush initiation forces in composite tubes for absorption of impact energy as taught or suggest by Reid et al..

***Claim Rejections - 35 USC § 102***

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

14. Claims 1-7, 9-14 and 30-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Quigley et al. (U.S. Patent No. 5,888,601).

Quigley et al. teach a contoured structural member (100 from Fig. 2 and abstract), comprising at least one contoured inner layer comprising a composite material (112, 114, 116 from Fig. 1 and column 5, lines 1-8 teach composite material), at least one contoured outer layer comprising a composite material (118, 120 from Fig. 1 and column 5, lines 1-8 teach composite material) and wherein an outer surface of the structural member has a polygonal shape (see Figs. 7-8 and 12), wherein the structural member has a closed configuration (see Figs. 1, 7-8 and 12), an interior region defined by an inner surface of the at least one inner layer, wherein the interior region is hollow, partially filled, or completely filled (see Figs. 7-13), wherein the at least one of the

Art Unit: 1772

composite materials is formed from a prepreg material (column 2, lines 30-35 and column 5, lines 1-8), wherein the prepreg material comprises a plurality of layers (Quigley discloses that all layers are made from fiber impregnated materials, see column 5, lines 1-8), wherein the plurality of layers have a plurality of fibers with an orientation ranging from 0 to 90 degrees (column 5, lines 20-34 and column 6, lines 1-15), an overwrap on a portion of the outer surface of the structural member (122 from Fig. 1 and column 5, lines 1-8) (applies to instant claims 1-7, 9-14 and 30-32).

With regards to claims 30-32, claims 30-32 recite the same structures as are recited in independent claims 1, 10, 11 and 12. It has been found that even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Therefore any process limitations recited in claims 30-32 have been given little to no patentable weight.

### ***Claim Rejections - 35 USC § 103***

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Quigley et al. (U.S. Patent No. 5,888,601) in view of Reid et al..

Quigley et al. disclose applicant's invention substantially as claimed. However, Quigley et al. fail to disclose a contoured structural member, wherein the structural member has at least one end with the at the at least one initiator not located near the at least one end.

Reid et al. teach a contoured structural tube (abstract, Figs. 2a and 2b), wherein the structural member has at least one end with the at the at least one initiator not located near the at least one end (18 from Fig. 3a) for the purpose of providing reduced crush initiation forces in composite tubes for absorption of impact energy.

Therefore it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to have provided at least one end with the at the at least one initiator not located near the at least one end in the contoured structural member of Quigley et al. in order to provide reduced crush initiation forces in composite tubes for absorption of impact energy as taught or suggest by Reid et al..

### ***Conclusion***

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Crane et al. (U.S. Patent No. 5,833,782) and Browne (U.S. Patent No. 5,914,163) are cited as relevant prior art.

Art Unit: 1772

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Miggins whose telephone number is (703) 305-0915. The examiner can normally be reached on Monday-Friday; 1:30-10:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pyon Harold can be reached on (703) 308-4251. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

MCM *[Signature]*  
February 10, 2003

*[Signature]*  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
*1772* *2/10/03*